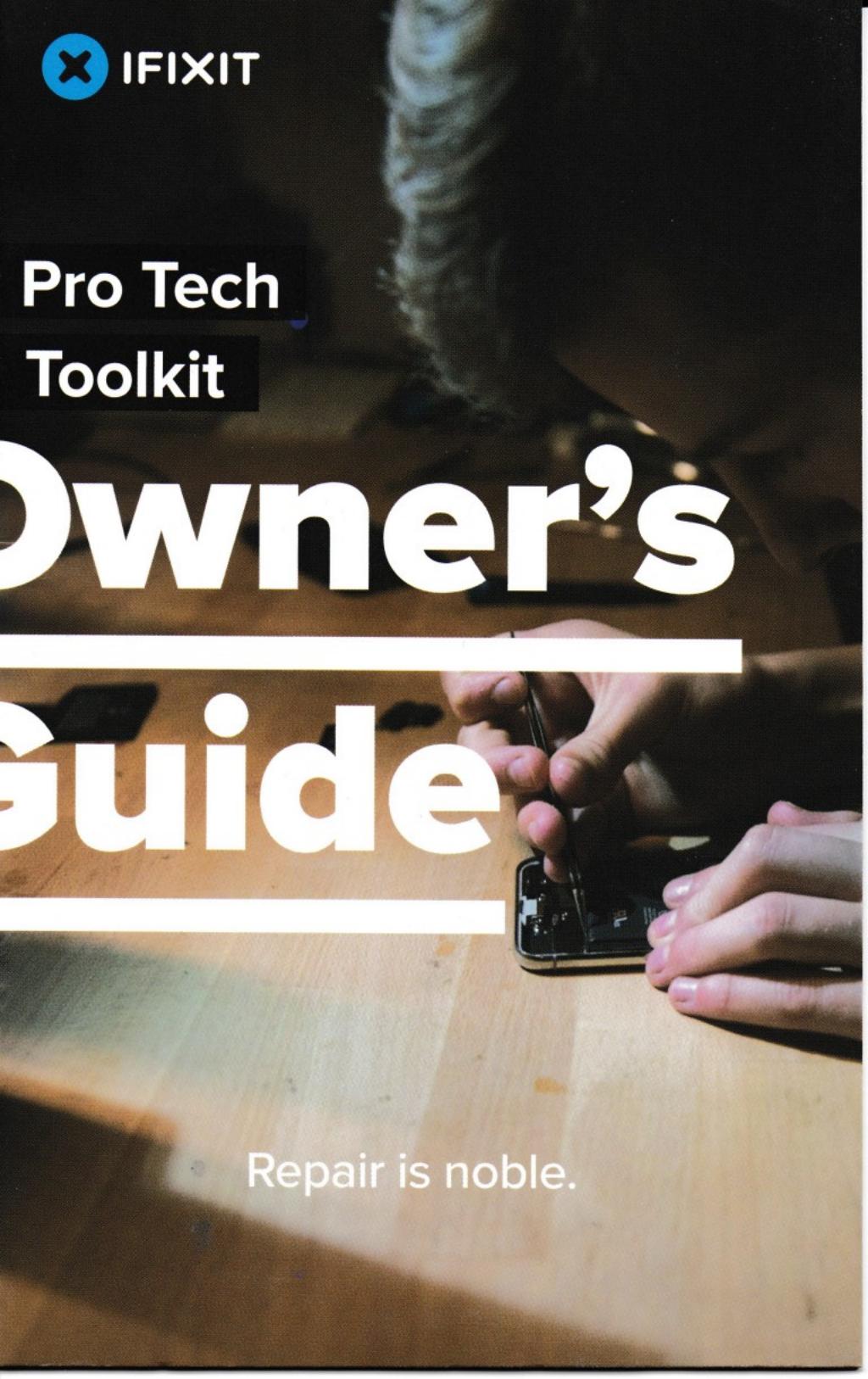




Pro Tech  
Toolkit

# Owner's Guide

A close-up photograph showing a person's hands working on a smartphone that has been disassembled. The phone's internal components are visible, and the person is using a small screwdriver to work on it. The scene is set on a light-colored wooden table.

Repair is noble.

A photograph of a young man with short brown hair, wearing a dark denim shirt, sitting on a grey couch. He is focused on repairing a black smartphone with a blue ribbon cable. A small potted plant is visible in the background behind him.

# Our Story

iFixit is a small company with a big mission: to teach everyone in the world how to fix their things. We buy every new gizmo the day it comes out—iPhones, XBoxes, you name it—and write free repair guides.

Our journey to open up every single gadget has taken us around the world, wherever they launch. Tokyo, Sydney, London, San Francisco. Pick a tech hub—we've been there with our screwdrivers.

No matter where we went, we were constantly struggling with our tools. We filled a suitcase with every possible prying and opening mechanism. And every step of the way, lugging that heavy suitcase around the world, we knew there had to be a better way.

For decades, motorcycle nomads have used cloth tool rolls to stow their wrenches. Inspired by their compact functionality, we designed an electronics toolkit to replace our suitcase. We finally nailed it, after years of trial and error: your Pro Tech Toolkit is the same one that we use for every teardown.

We've carefully selected the most useful tools for releasing tabs, disconnecting connectors, getting into tight spaces, and picking up small parts.

This toolkit was designed by fixers, for fixers. We can't wait to see where your repairs take you.

**Let's fix the world together.**

# Welcome to a Universe of Repairs

A complete repair solution: tools and know-how

This isn't just a toolkit. It's a game changer. Level up your capabilities with over 50,000 repair guides on ifixit.com — the free repair guide for everything, written by everyone.

Get started today at:

[ifixit.com/Guide](http://ifixit.com/Guide)



## Suction Handle

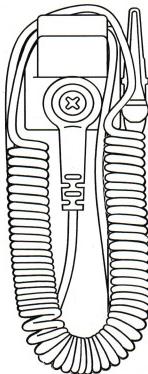
**It really sucks**

Safely lift and remove phone and tablet glass panels. For years we struggled with finding a reliable source for quality suction cups, so we bit the bullet and engineered our own. The specially formulated rubber sticks stronger and longer. But the real star is the handle, which gives you more leverage than any other suction cup this size.



### PRO TIP

If you can't get a grip on broken glass, cover the glass with packing tape first.



## Anti-Static Wrist Strap

**ESD: The silent killer**

Protect your work from deadly electrostatic discharge by grounding this strap. Custom manufactured by iFixit. Most anti-static wrist straps are made for use in manufacturing throughout Asia, and do not pass our ergonomics test, if they fit at all!



### PRO TIP

Ground yourself to your workpiece or the metal legs of your desk.

# Pro Tech Toolkit

Suction Handle



Opening Tools



Reverse Tweezer

Opening Picks



Tweezers

Spudgers

Standard

Halberd

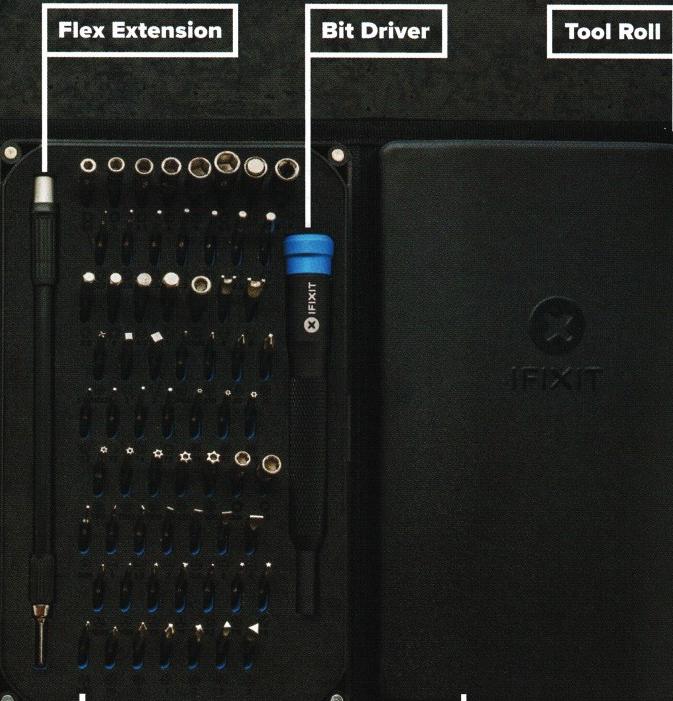
Metal

Jimmy

Flex Extension

Bit Driver

Tool Roll



64 Specialty Bits

Sorting Tray Lid

# Spudger

## Black pry stick



This tough 5" multitool is pliable and antistatic, making it ideal for working around sensitive electronic components without fear of shocking or scratching them.

Everyone's favorite tool for poking, prying, scraping, and wedging. It's made of rugged glass-filled nylon, but soft enough that it won't scratch your electronics. Oh, and it's pronounced *spud-jer*.

### PRO TIP

Stick 'em with the pointy end.



# Jimmy

## Opening knife

Filling the gap between a putty knife and a utility blade, Jimmy can cleanly free painted switch covers, slip between tiny cracks to open enclosures and free stuck windows. This flexible, blunt blade with an ergonomic handle eases your way into the trickiest places.

The ultimate device opener. The Jimmy's ergonomic handle allow you to pry powerfully and precisely.

### PRO TIP

For hidden latches, use a guitar pick to open a crack and then pop the tab with the Jimmy.

# Get the Most Out of Your Toolkit

## Pro Tip: Organization is key.

The cover of the Mako Precision Bit Set doubles as a sorting tray. Or snap it onto the back and use the magnetic sheet built into the tool roll to sort screws and other ferrous parts.

## Pro Tip: Static is the enemy.

Electronics are sensitive to tiny electric shocks from static buildup. Ground yourself before you work by touching or clipping yourself onto a grounded metal surface.

## Pro Tip: Magnets are your friend.

The driver handle magnetizes bits when they are inserted (if you need a non-magnetic bit, use the flexible extension).

## Unique Bits



### Torx T5

Most common smartphone bit



### Phillips 000

Eyeglasses and laptops



### Gamebit 3.8

Nintendo & Sega game consoles



### Tri-point 000

Apple Watch



### Pentalobe 2

Most iPhones



### Oval Drive

Espresso machines



### SIM Eject Bit

Smartphone sim cards



### Magnetic Pickup Bit

Retrieve dropped parts



### Handle adapter

4 mm 1/4" to 4mm

# Kaitlin Osborne

CEO, MOM, RIGHT TO  
REPAIR ADVOCATE, AND  
REPAIR PROFESSIONAL



@iphonerepairgirl

## The best techs use the best tools

Kaitlin started her own repair business, **Desert Wireless**, at 22 after working for an independent repair shop. Between taking care of her customers, raising her kids, and running a DIY YouTube Channel, she's always on the move. Armed with her Pro Tech Toolkit, Kaitlin is ready to fix anything, anywhere—in her shop, at her house, at a Starbucks, or in her car.

**"Repair is a skill that takes practice, and won't feel quite right at first, but if you apply yourself then it gets a lot easier."**

Kaitlin loves that repair is a solution. "Electronics repair often means fixing one of the most important vessels through which someone communicates—with their family, their friends, their clients or coworkers or teachers," she says.

As for the future of her repair business, Kaitlin wants to learn to microsolder. She also wants to teach repair one-on-one and start a repair café in Joshua Tree. "Anyone can do it. Every great technician had once never seen the inside of an electronic device."



# Magnetic Project Mat

## Organize your fix

Born out of our obsessive need to keep track of small parts in complex products, the Magnetic Project Mat is a game changer.

This mat is indispensable for serious projects where a single lost or mixed up screw can spell disaster. Includes a smearproof erasable pen for rapid note taking.

# Mahi Driver Kit

## Built to last



This 48 bit kit includes all the  $\frac{1}{4}$ " bits you'll need to handle the toughest and torque-iest fasteners in any home or shop project. We packed in all the common bits you'll need, as well as the larger security bits you'll come across. Be prepared for any fastener!

Combined with a high-quality machined driver handle, this sturdy kit is ready for any task.

# Parts

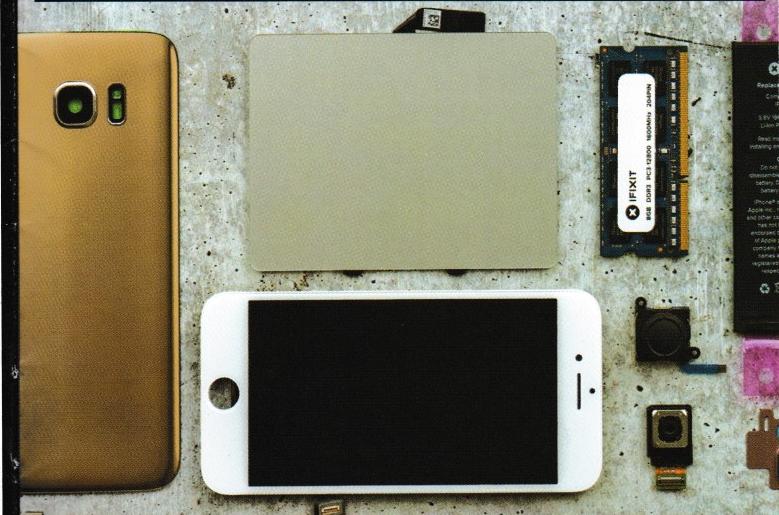
## The Most Trusted Source

All the electronic service parts you need—in one place.

From iPhone screens and batteries to replacement Xbox parts, we've got your back.

Not all parts or sellers are created equal. And sometimes it's hard to tell apart the good, the bad, and the inconsistent. We've spent more than a decade vetting sources and suppliers.

The quality of our parts consistently leads the industry because we have the most robust processes: all parts are rigorously tested, iFixit certified, and backed by our Lifetime Warranty.



## Parts for

iPhone  
Android  
Computers

GoPro  
Kindle  
Consoles

Drones  
Cameras  
& More



# REPAIR SAVES THE PLANET

# REPAIR IS SUSTAINABLE

WE HAVE THE RIGHT:

TO DEVICES THAT CAN BE OPENED  
TO REPAIR DOCUMENTATION FOR  
EVERYTHING  
TO REPAIR THINGS IN THE PRIVACY OF OUR OWN HOMES  
TO ERROR CODES & WIRING DIAGRAMS

LEARN MORE AT

[ifixit.com/Right-to-Repair](http://ifixit.com/Right-to-Repair)

# Welcome to the Community

The iFixit community has millions of fixers connected by the information we share. We fix skateboards with new bearings. Toasters with a thermal fuse and a soldering iron. Toilets with a piece of dental floss. KitchenAids with a spot of grease. iPhones with better batteries than Apple has ever provided.

Fixers around the world are sharing their knowledge every day. Ask a question, post photos to start a new how-to guide, or lend a hand tracking down a thorny diagnosis.



---

#iFixit

---

You can fix it,  
we can help.

---

**IFIXIT.COM**

---